“Voices from the Field” - Interviews of Scientists and Engineers about Literacy in Their Day-to-Day Work

Lesson and Professional Development Suggestions

Lessons with students

- Listen to and discuss clips with students before a research project. For example, as a class you could listen to Eikenberry Q3. What are her sources for her research? How could students apply those ideas? For example, students might email or call a scientist or engineer as part of their project.
- Why do we collaborate with our peers and have them review our work? How do scientists verify that their work is high quality? Cole Q3 and Eikenberry Q5 both talk to these ideas.
- Students might question the importance of documenting every minute detail of the lab investigations. Listening to Cole Q4 and Eikenberry Q6 will provide them details on how scientists document their work and why.
- It’s valuable for students to know what scientists and engineers do in their day-to-day work. They can listen to the first question of any of the interviews to get some ideas in that regard. They could also have a project where they have to interview a STEM professional about their job.
- These clips could be part of a lesson on the importance of unbiased work in science, particularly focusing on letting evidence speak for itself. Eikenberry’s final question could provide some evidence to help in that discussion.

Professional development with teachers

- Listen to any of the clips and discuss as a science or STEM team how well you’re preparing students for work like practicing scientists and engineers. A few clips that might be useful for that discussion would be Eikenberry Q5 or Cole Q3.
- As a group, generate your own questions as you listen to these clips, both for your own practice and to ask students. Students could certainly also generate their own questions.
- Digital vs. handwritten notebooking - what should we do in our department? Should students be keeping a notebook and how would that look? What do scientists think? Cole Q5 and Eikenberry Q6 dig into this idea.
- How often do you have students talking to STEM professionals in your class? Field trips? Interviews? Presentations? How could you better use the resources in your community to connect students with practicing STEM gurus? How can that interaction be structured so that students can begin to see career pathways for themselves?